



DEPARTMENT OF THE NAVY  
OFFICE OF THE CHIEF OF NAVAL OPERATIONS  
WASHINGTON, DC 20350-2000

OPNAVINST 1500.66<sup>IN REPLY REFER TO</sup>  
OP-593E  
6 MAR 1991

OPNAV INSTRUCTION 1500.66

From: Chief of Naval Operations

Subj: NAVAL AVIATION FLEET REPLACEMENT AIRCREW TRAINING PROGRAM  
(PILOT (RP), NAVAL FLIGHT OFFICER (RNFO), AND AIRCREW  
(RAC))

Ref: (a) OPNAVINST 1500.11G (NOTAL)  
(b) OPNAVINST 1510.10A (NOTAL)  
(c) OPNAVINST 3500.31D (NOTAL)

Encl: (1) Procedures for Review and Submission of New or  
Revised Aircrew Curriculum Outlines  
(2) Aircrew Training Track Format  
(3) Aircrew Curriculum Review Conference Procedures

1. Purpose. To establish policies, responsibilities, and procedures for the Fleet Replacement Aircrew Training Program, to review, standardize and update Fleet Readiness Squadron (FRS) aircrew training tracks and curricula.

2. Cancellation. OPNAVINST 1500.58.

3. Background. The operational effectiveness of fleet squadrons is directly affected by the FRS training each aircrew member receives. To maintain cost effective training programs that satisfy identified training requirements, all curricula and instructional literature must be accurate and current with latest developments, innovations, procedures, and technology. To accomplish that, Aviation Training Model Managers, in conjunction with their chain of command, must ensure that all aspects of the development, evaluation, implementation, standardization and update process associated with the training programs and training equipment for a particular type/model/series (T/M/S) aircraft are met.

4. Functions. Functions within a training program include:

a. Definition of training objectives.

b. Preparation and submission of curriculum outlines (per enclosure (1)).



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c. Preparation and submission of training tracks (per enclosure (2)).

d. Coordination/integration of academic and flight program phases.

e. Student personnel accounting/reporting.

f. Establishment of student performance standards.

g. Providing tailored instruction based on previous training/experience and ultimate duty station requirements.

5. Scope. The provisions of this instruction apply to all naval aircrew personnel (active and reserve), Marine Corps aircrew training associated with joint fleet readiness squadrons, type commanders, functional wings, and USN FRSs. Marine Corps FRS curricula are standardized and updated through periodic Training and Readiness (T&R) Manual (MCO P3500.14B (NOTAL)) conferences.

6. Definition of Terms: For the purpose of this instruction, the following definitions apply:

a. Aviation Training Model Manager (ATMM) - A unit designated by the Director, Aviation Manpower and Training Division (OP-59) responsible for reviewing, standardizing, and updating the Fleet Replacement Aircrew Training Program for a specific T/M/S aircraft.

b. CANTRAC - The catalog of Navy training courses.

c. EPAD - The enlisted personnel action document (NAVPERS 1306/55) used by the Navy Military Personnel Command to make changes to an individual's assignment record.

d. Master course schedule - A schedule of instruction, prepared by the training activity, to indicate the period-by-period program for each day and week of the course.

e. NITRAS - The Navy Integrated Training Resources and Administration System is a Navywide automated information system designed to manage and support the Navy military training effort. It collects, compiles and provides student and training information to various higher echelons of the Navy.

7. Policy. The implementation of this instruction is to be guided by appropriate policies as prescribed by reference (a). Specifically applicable are the following:

a. All elements of the program are to be complementary and coordinated. Organization and management of the program shall provide a quality, efficient and cost effective, standardized training program, to produce the best trained aircrews possible.

b. Replacement aircrew training will normally accommodate organizational aircrew requirements of operating squadrons/units, and shall provide the trainee with the knowledge and skill of the specific tasks to be performed.

8. Responsibilities. Implementation responsibilities for the Aircrew Training Program are:

a. Assistant Chief of Naval Operations (ACNO) (Air Warfare). The Director, Aviation Manpower and Training Division (OP-59) is responsible for implementing the Naval Aviation Training Program for U.S. Navy and joint USN/USMC FRSs, as delineated in reference (a). OP-59 shall:

(1) Establish policy, determine aviation manpower and training requirements, identify priorities for aviation training, and develop aviation training plans.

(2) Designate an ATMM for each aircraft community. Specific ATMMs will be listed by OPNAV Notice (1500 series).

(3) Program aviation training resource requirements (including training manpower), and conduct periodic curriculum review conferences as outlined in enclosure (3).

(4) Ensure that a standardized curriculum exists within T/M/S aircraft FRSs.

(5) Approve or disapprove, based on requirement and priority considerations, FRS course establishment, disestablishment, and revision to curriculum outlines/training tracks. Revisions in the areas cited above will take into account requirements expressed by the Commandant of the Marine Corps, and the Deputy Chief of Naval Operations (DCNO) (Manpower, Personnel and Training) (OP-01).

b. Commandant of the Marine Corps (CMC)/Commanding General, Fleet Marine Forces. Shall ensure Marine Corps requirements are accurately identified, and provide representation for curriculum review/revision in joint FRS training.

c. Commander, Naval Air Systems Command. Include specific consideration of aircrew training in discharging responsibilities

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assigned by reference (a). Specific responsibility includes, but is not limited to:

- (1) timely and adequate training equipment support,
- (2) technical review of training programs,
- (3) providing technical assistance/support.

d. Chief of Naval Personnel. Plan and coordinate the timely arrival of qualified instructor and student personnel, to ensure required assets are available to support the operating forces.

e. DCNO (Manpower, Personnel and Training)/Chief of Naval Education and Training (CNET)/Chief of Naval Technical Training/Fleet Aviation Specialized Operational Training Group (FASOTRAGRU)/ Naval Air Maintenance Training Group (NAMTRAGRU). Discharge responsibilities as outlined in reference (a).

f. Air Type Commanders

(1) The Air Type Commander, through the respective functional wings/aviation training model managers, shall provide for systematic review and evaluation of all phases of the Aircrew Training Program for assigned aircraft.

(2) Shall review all curricula/training tracks, and proposed changes to ensure maximum training effectiveness and standardization.

(3) Shall ensure that the counterpart Air Type Commander has an opportunity to review and comment on all proposed changes.

(4) Shall comply with the provisions of reference (a), with particular emphasis on the submission of curriculum outlines and training support requirements.

(5) Shall comply with the provisions of reference (b), ensuring all CNO approved training tracks/courses are entered into the NITRAS/CANTRAC systems.

g. Functional Wings. Shall ensure systematic review and evaluation of all phases of the Aircrew Training Program for assigned aircraft. Prior to being forwarded, all curriculum/training track material shall be reviewed to ensure maximum training effectiveness and standardization.

h. Aviation Training Model Managers. Under the direction of the air type commander/functional wing, the ATMM is respon-

sible for maintaining a quality training program by continually reviewing FRS curricula/training tracks. This shall require the following:

(1) Evaluate curricula/training tracks to ensure current requirements are met and outdated requirements are eliminated.

(2) Annually solicit inputs for curriculum improvements from fleet squadrons and like FRSs for the particular T/M/S aircraft.

(3) Review all proposed changes to training requirements, curricula and syllabi; collate and prepare potential curriculum/training track revisions in preparation for a curriculum review conference.

(4) If extraordinary events warrant, recommend to OP-59, via the chain of command, that an FRS curriculum review conference be held ahead of planned schedule.

(5) Forward curriculum review conference agenda items to ACNO (Air Warfare), type commanders, functional wings, and fleet squadrons 60 days prior to the scheduled conference.

(6) Host the FRS curriculum review conference to meet the objectives of enclosure (3).

i. Fleet Readiness Squadrons

(1) Shall provide for systematic review and evaluation of all phases of the Aircrew Training Program, and submit comments/recommendations to the ATMM/higher authority when appropriate.

(2) There must be close liaison between the training agent and the ultimate command concerning individual student training track modification. To accomplish that, the following guidance is provided:

(a) Upon receipt of student's follow-on orders/EPAD, the FRS should contact the ultimate command to coordinate any recommended changes to the individual's training track. Any additional training should be limited to the FRS's locale. Changes in the geographic location of training must be justified to, and approved/funded by, the type commander.

(3) Shall establish student performance standards in accordance with type commander directives.

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(4) Shall provide monthly status of aircrew training to CNO, via the chain of command, under reference (c).

(5) Use fleet feedback system to solicit recommended changes to the FRS curriculum.

(6) FRS commanding officers, within the guidelines of NATOPS, are authorized tailoring of approved CNO curriculum to comply with operational/fleet requirements for individual trainees. Any deviation shall be noted in the trainee's NATOPS Training Jacket.

  
J. M. MUNNINGHOFF  
By direction

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PROCEDURES FOR REVIEW AND SUBMISSION OF NEW  
OR REVISED AIRCREW CURRICULUM PACKAGES

1. The aircrew curriculum package, consisting of the four parts listed below and a training track, will be developed/revised by the designated fleet readiness squadron (FRS) Aviation Training Model Manager (ATMM).

- Part I - Course Description
- Part II - Facility Data, Student/Class Data
- Part III - Curriculum Outline
- Part IV - Flight and Simulator Summary

Note: The Equipment Requirements List and Bibliography have been deleted.

2. The curriculum outline format submitted to CNO shall contain a listing of lesson titles, events and the associated time to train. Include, as a minimum, the following items per example:

UNIT 7.0 HYDRAULIC AND ELECTRICAL SYSTEMS			
LESSON	TITLE	EVENT TYPE	LENGTH
701	ELECTRICAL SYSTEM	MIL	1.0
702	AIRCRAFT LIGHTING SYSTEM	ST	1.0
703	ELECTRICAL SYSTEM EMERGENCIES	CBT	1.5
704	DE/ANTI-ICE SYSTEMS AND EMERGENCIES	WB	1.0
705	INSTRUCTOR GUIDED REVIEW/EXAM	IGR	2.0
706A	BRIEF:	S	0.8
706	OFT 10		2.0
706B	DEBRIEF:	S	0.5
707A	BRIEF:	S	1.5
707	AC 5	AC	2.0
707B	DEBRIEF:	S	1.0
708	GUIDED STUDY	S	6.0
TOTAL HOURS IN THIS UNIT ARE:			20.3

Note: Some examples of event types are:  
MIL - Mediated Interactive Lecture  
ST - Slide/Tape  
CBT - Computer Based Training  
WB - Workbook  
IGR - Instructor Guided Review  
S - Supervised



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OFT - Operator Flight Trainer  
AC - Aircraft  
VT - Video Tape  
WST - Weapon Systems Trainer  
WTT - Weapon Tactics Trainer  
TTT - Tactics Team Trainer  
SOT - Sensor Operator Trainer  
CPT - Cockpit Procedures Trainer

3. For those weapon systems having dual-sited FRSSs, the curriculum package shall be the product of a joint, mutually acceptable effort. Development procedures for dual-sited training are:

Step 1. In conjunction/coordination with the counterpart FRS, the ATMM shall prepare the new/revised curriculum package in accordance with type commander directives, and forward it to the type commander, via the chain of command, for review.

Step 2. The functional wing/type commander shall review the package, coordinate with the counterpart functional wing/type commander, resolve any differences in Part III, and forward to CNO (OP-593) for approval.

Step 3. CNO (OP-593) will approve/disapprove the curriculum package within 45 days of receipt. Upon approval, OP-593 will assign the Course Identification Numbers (CIN) for new courses and tracks. The curricula effective date will be the date on the CNO approval letter. Course Data Processing codes (CDPs) will be issued by the type commanders, or Naval Education and Training Program Management Support Activity (NETPMSA) as appropriate, upon request of the FRS.

Note: Part III shall reflect maximum standardization between like T/M/S FRSSs.

4. For those weapon systems with single-sited training, the ATMM shall follow the procedures outlined in paragraph 3, Steps 1 and 2. After review and comment, concurrent with forwarding a copy of the curriculum package to CNO (OP-593), the cognizant type commander will forward an information copy of the curriculum package to the counterpart type commander.

5. The course duration (hours of instruction per class) shall be the total of all academic, simulator and flight training hours.

6. Peacetime (P) days to train for a new curriculum are computed by adding a 10 percent flexibility factor to the trainee's master

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course schedule. The flexibility factor accounts for holidays, safety standdowns, command inspections, etc. The procedure for calculation of curriculum length is:

Step 1. Find the total number of training days from the trainee's master course schedule.

Step 2. Multiply Step 1 days by 1.10 (10% flexibility factor) = Gross Training Days (round up to the next whole number).

Step 3. Divide Gross Training Days by 5 (5 training days per week) = Weeks to Train.

Step 4. Multiply the "whole number" of Weeks to Train by 7; then add one day for each remaining .2 weeks. The resulting sum equals the Total Peacetime (P) calendar days to train. (Note: if the course ends on a Friday, do not count the next weekend in the total.)

Step 5. Mobilization (M) calendar days are found in the enclosures of COMNAVAIRLANTINST 1500.18C (NOTAL) and COMNAVAIRPACINST 1500.6E (NOTAL). (Note: Mobilization days are automatically computed by NITRAS when peacetime days are input.)

Example: A proposed curriculum has a master course schedule of 83 training days.

Step 1. 83

Step 2.  $83 \times 1.10 = 91.3 = 92$

Step 3.  $92 \div 5 = 18.4$

Step 4.  $18 \times 7 = 126$ ;  $.4 \div .2 = 2$ ;  $126 + 2 = 128$  (P) days

Step 5. 106 (M) days

6. Syllabus changes involving additional time to train, or increased flying hours must be fully justified, and shall not be entered into the NITRAS/CANTRAC system, or implemented prior to receiving CNO approval.

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AIRCREW TRAINING TRACK FORMAT

TRACK TITLE:

BILLET  
TITLE:

CANTRAC NUMBER:

RATING(S):

NEC/MOS/NOBC:

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PHASE I (General Support Courses)  
examples: Indoctrination Course (number of weeks)  
Aircraft Fire Fighting Training  
Leadership/Management Educational Training

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PHASE I Length: (total weeks)

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PHASE II (Type Aircraft Support Courses)  
examples: NAMTRAGRUDET Courses (number of weeks)  
FASOTRAGRUDET Courses  
Aviation Weapons Courses  
Aviation Physiology/Survival Training Courses

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PHASE II Length: (total weeks)

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PHASE III (Core Aircraft Course)  
examples: FRS Pilot/NFO/  
Aircrew Category Courses (number of weeks)

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PHASE III Length (total weeks)

---

PHASE IV (Other associated training courses)  
examples: Instrument Ground School (number of weeks)

---

PHASE IV Length: (total weeks)

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TOTAL TRACK LENGTH:

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(total weeks)

TRACK ENTRY LEVEL REQUIREMENTS

SECURITY CLEARANCE:

CAREER DESIGNATED:

COMPONENT NEC(S):

PREREQUISITE COURSES:

Enclosure (2)

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INSTRUCTIONS FOR TRAINING TRACK FORMAT

1. A Training Track is required when more than one course is needed to complete requirements for an NEC/MOS/NOBC designation.
  2. CANTRAC NUMBER. For a new track/course leave blank; OP-593 will assign the Course Identification Number (CIN). After approval, a Course Data Processing code (CDP) will be assigned by the type commander, or NETPMSA as appropriate, upon request of the FRS.
  3. RATING. The rating(s) available for course entry.
  4. NEC/MOS/NOBC. Those classifications/codes issued on completion of all training track courses.
  5. PHASE I-IV. Above each course list the associated CIN. List the course length in number of weeks. If the course is not mandatory to receive the NEC/MOS/NOBC (e.g., the student may have already completed the course, or the qualification may not have lapsed) put "(as required)" beneath the course.
- Note: All courses in the track must be completed prior to awarding the NEC/MOS/NOBC. The "as required" courses are indicative of courses a student may have previously completed or that are required for a periodic qualification.
6. PHASE/TRACK LENGTH. List "total of all courses/total of required courses".

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AIRCREW CURRICULUM REVIEW CONFERENCE PROCEDURES

1. Purpose. The curriculum review conference is a CNO sponsored review of designated weapon systems training courses, held to ensure compliance with the current ROC/POE, and latest training and readiness figures reported in accordance with reference (c). To accomplish that the conference will:

- a. Identify deficiencies in current training tracks, courses, curriculum content, and NEC/MOS/NOBCs.
- b. Resolve problems which are identified.
- c. Program corrective action.
- d. Establish a tailored aircrew training track for aircrew billets.
- e. Provide a communication bridge for community participants to generate an interchange of ideas.

2. Policy. The curriculum review conference process ensures compliance with CNO policy, including the following basic elements:

- a. Development of structured training tracks to promote standardization between fleets to the maximum extent possible.
- b. Formal training shall be limited to subject matter taught most effectively and economically in a classroom setting.
- c. The Aircrew Training Program shall provide the knowledge and skill required of specific tasks which the trainee will be required to perform.

3. Procedures. The curriculum review conference brings all elements of the training process together. Conference membership is composed of fleet subject matter experts, who must be familiar with the technical and operational aspects of the weapon system to be reviewed. Subject matter experts must also be aware of current operational requirements and problems, and their relationship to the training process. The respective ATMM will host the conference. Attendees shall include knowledgeable representatives from the respective FRS(s) and wings, COMNAVAIRLANT, COMNAVAIRPAC, and CNO. Attendees on an as required basis include: CNET, COMNAVAIRESFOR, CMC, NMPC, NAVAIR, NAMTG, and FASOTRAGRU.

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4. Preparation. Prior to a curriculum review conference, participants should be totally familiar with existing curricula and training tracks in order to:

- a. Modify existing training tracks as required.
- b. Establish new training tracks as required.
- c. Recommend revisions, deletions, or development of new NEC/MOS/NOBCs as required.
- d. Review appropriate aircrew training tracks and training materials, and recommend revisions as required.
- e. Identify and describe new course requirements.

5. Technical Audit. A curriculum review conference fulfills the technical audit requirement, as per NAVAIRINST 1500.1C (NOTAL).

6. Schedule. Conferences will be held periodically for each T/M/S aircraft, at least every three years, with notification via an OPNAV Notice.